



**SCAR Standing
Committee**

Paper 19

Person

Responsible:

SCATS

Agenda item 10

Aleks Terauds

SCAR Executive Committee Meeting 2019

Plovdiv, Bulgaria, 29-31 July 2019

Standing Committee on the Antarctic Treaty System 2018-19 Report

Report Author

Aleks Terauds (Australia)

Summary

Since the last Delegates Meeting, the SCAR Standing Committee on the Antarctic Treaty System (SC-ATS) continued to focus on the provision of advice to the Antarctic Treaty System and engaged in a range of international activities that enhanced SCAR's reputation as a provider of independent and scientific advice and as a leader in Antarctic science. These activities have included: active participation in the 2018 CCAMLR Meetings; a workshop on Antarctic Tourism in 2019; the 2019 CEP/ATCM meetings; the development and support of one major international workshop; maintaining an active and influential role in the Antarctic Environments Portal; and direct involvement in a diverse range of research projects.

SC-ATS continues to energetically pursue the development of new policy-relevant advice through active engagement with international scientists and policy makers. To help achieve this, SC-ATS is continually working on developing ideas to underpin future international initiatives.

Standing Committee updates since 2018 Delegates Meeting

What has been achieved?

Note that each activity is followed by the lead SC-ATS representative and others where applicable.

Date	Activity
22-26 October 2018	Participate in SC-CAMLR (Mary-Anne Lea, Cassandra Brooks, Aleks Terauds, Steven Chown)
29 Oct- 2 Nov 2019	Participate in CCAMLR (Mary Anne-Lea, Cassandra Brooks)
November 2018	Finalisation of Use of Animals Code of Conduct (Yan Ropert-Coudert)
December 2018	Finalisation of update of the Anthropogenic Noise in the Southern Ocean (Aleks Terauds, Chuck Kennicutt, Steven Chown Chandrika Nath)
February 2019	Publication of “A snapshot of biodiversity protection in Antarctica” (Wauchope et al. 2019 ¹) (Aleks Terauds)
March 2019	Finalisation of the Draft Code of Conduct for Geological Activities in Antarctica (Marcello Reguero, Aleks Terauds, Kevin Hughes)
April 2019	Memorandum of understanding signed with the International Polar Heritage Committee (Chandrika Nath)
April 2019	Review and Update of the “Checklists for supply chain managers of National Antarctic Programs for the reduction in risk of transfer of non-native species” (Aleks Terauds, Steven Chown)
May 2019	Participation in SC-CCAMLR Working Group – Ecosystem Monitoring Management (Bettina Meyer)
June 2019	Joint SCAR/CEP Workshop on Further Developing the Systematic Area Protection of Antarctica (Aleks Terauds, Chandrika Nath, Steven Chown, Yan Ropert-Coudert, Luis Pertierra, Hanne Nielsen, Heather Lynch, Peter Convey)
3 July 2019	Successful presentation of the SCAR Lecture ² at ATCM XLII - CEP XXII (Steven Chown)
1-5 July 2019	Twenty-three papers submitted to XLII (6 Working Papers, 16 Information Papers, 1 Background Paper; 16 as lead-proponent) See Appendix 1 for details (Aleks Terauds)
Ongoing	Editorial input to the Antarctic Environments Portal (Aleks Terauds, Akinori Takahashi, Carlotta Escutia)
Ongoing	Input into SG-CCR and CEP Climate Change response works program (Aleks Terauds, Chandrika Nath)

¹ Wauchope, H., Shaw, J.D. and Terauds, A. (2019) A snapshot of biodiversity protection in Antarctica. *Nature Communications*. 10(1) 946. <https://doi.org/10.1038/s41467-019-08915-6>

² Chown, S.L. SCAR Science Lecture 2019: What Does the Paris Climate Agreement mean for Antarctic and Southern Ocean Environmental Protection? ATCM XLII - CEP XXII, Prague, 2/6/2019

What lies ahead?

Date	Activity
21 Oct – 1 Nov 2019	CCAMLR/SC-CAMLR (Delegation leads Mary-Anne Lea and Cassandra Brooks)
October 2019 – February 2020	Workshop – design of a monitoring strategy for Antarctic tourist sites (arising from CEP request)
August 2019- February 2020	Implement a continent-wide systematic conservation planning exercise for Antarctica (arising from workshop recommendations) to present at next year’s CEP.
August 2019 – February 2020	Code of Conduct for Geological Activities and a framework for the identification of geoheritage sites (in conjunction with Geological Heritage and Geoconservation Action Group)
August 2019 – February 2020	10-year anniversary of the Antarctic Climate Change and the Environment (ACCE) Report (ACCE Expert Group with SCATS oversight and external assistance as required)
May-June 2019	ATCM XLIII – CEP XXIII
May 2019	SCAR Lecture
2019-2020	Transition arrangements for SC-ATS Chief Officer
Late 2020	Workshop on wilderness values in line with 2019 CEP commitments
Ongoing	Editorial and content input into Antarctic Environments Portal
Ongoing	Input into subsidiary Group on Climate Change Response and Climate Change Response Work Program

Note that at the recent meeting of the Subsidiary Group of the Climate Change Response Work Programme (CCRWP) on 30 June 2019, requests were made for SCAR to update the new format CCRWP with relevant research. Terauds indicated that there were limited resources to apply to this, but acknowledged that the CCRWP was a useful mechanism for prioritising and identifying actions of relevance to the CEP. Further discussion is required as to the mechanism by which this engagement and input is managed and coordinated in SCAR.

Budget

Changes to planned use of funds for 2019 and 2020

Year (YYYY)	Purpose/Activity	Amount (in USD)	Contact Name	Contact Email
2020	Workshops (TBA)	\$13,000	Aleks Terauds	Aleks.Terauds@gmail.com
2020	SC-ATS related travel	\$5,000	Aleks Terauds	
2020	Support for Geo-conservation frameworks (See Appendix 2)	\$2,000	Aleks Terauds	
Total		\$20,000		

Workshop(s) will aim to progress commitments from the 2019 CEP, particularly with respect to research related to systematic conservation planning, monitoring of tourism sites, wilderness values and tourism carrying capacity.

Membership

Changes to SC-ATS Membership since 2018 Delegates Meeting report

Role	First Name	Last Name	Affiliation	Country	Date Started	Date Term is to End
Member*	Luis	Pertierra	URJC	Spain	2018	2022 [#]
Member	Bettina	Meyer	SKAG	Germany	2018	2022 [#]
SCAR-CCAMLR Liaison	Mary-Anne	Lea	EG-BAMM	Australia	2018	2022 [#]

* denotes early-mid career researcher

[#] denotes term can be extended by another 4 years

Other membership changes since 2018 Delegates Meeting:

Cassandra Brooks took on the role of Deputy Chief Officer.

SCAR Fellowship Reviewers

Please list any people (name and email address) volunteered by the committee who would be willing to serve as reviewers for the next few years, along with 1-3 keywords on their principal expertise.

First Name	Last Name	E-mail	Principal Expertise
Aleks	Terauds	aleks.terauds@gmail.com	Terrestrial ecology, invasive species, quantitative modelling, climate change impacts on biodiversity
Akinori	Takahashi	atak@nipr.ac.jp	Marine birds and mammals, bio-logging and biotelemetry
Yan	Ropert-Coudert	docyaounde@gmail.com	Marine birds and mammals, marine ecology, ecophysiology, bio-logging and biotelemetry, MPAs.
Tom	Bracegirdle	tjbra@bas.ac.uk	Antarctic meteorology and climatology
Daniela	Liggett	daniela.liggett@canterbury.ac.nz	Social sciences
Marcelo	Reguero	regui@fcnym.unlp.edu.ar	Geosciences, Paleontology
Luis	Pertierra	luis.pertierra@gmail.com	terrestrial ecology, invasive species, phylobiogeography, macroecology, ecological modelling

Additional information

Outreach, communication and capacity-building activities

Popular articles and media on Wauchope et al. (2019) (e.g. SCAR website, AAD website – <http://www.antarctica.gov.au/news/2019/enhancing-biodiversity-protection-in-antarctica>).

Two SCAR EMCRs were invited to the Joint SCAR/CEP Protected Area workshop. Dr Hanne Nielsen (SC-HASS) and Dr Luis Pertierra (SC-ATS) made valuable contributions in the lead-up and during the workshop, and their assistance in this regard was much appreciated.

Note: A request for extra funding to facilitate more ECMR interaction with SC-ATS was not approved by SCAR Delegates in 2018. In addition to a lack of capacity development, this also had implications for workload of the SCATS committee members. This is worthy of further discussion in ExCom.

Notable Papers

Wauchope, H., Shaw, J.D., & Terauds, A*. (2019) A snapshot of biodiversity protection in Antarctica. *Nature Communications*, 10(1) 946. <https://doi.org/10.1038/s41467-019-08915-6>.

This work provides the first continent wide assessment of the representation of Antarctic biodiversity in the current suite of Antarctic Specially Protected Areas. The assessment found that 44% of Antarctic species are currently found in ASPAs, but that protection is regionally uneven, and biased towards easily detectable and charismatic species like seabirds.

Major Products

See Appendix 1 – title of papers is self-explanatory

Major Impacts

(List of impacts by sub-heading with 150-word description of each, with five maximum – shaded example provided below)

1. Better understanding of Systematic Conservation Planning for Antarctica

The Joint SCAR/CEP Workshop on Further Developing Area Protection in Antarctica was a landmark workshop that brought together scientists and policy makers. The CEP agreed to a range of recommendations from the workshop, which provided a clear mandate for SCAR to continue to support and facilitate work in this area.

2. Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica

The Committee for Environmental Protection (CEP) welcomed the SCAR Code of Conduct for Use of Animals for Scientific Purposes. This code of conduct was endorsed by Resolution by the Antarctic Treaty Consultative Parties.

3. *Guidance for progressing issues associated with Anthropogenic Noise in the Southern Ocean.*

The CEP welcomed SCAR's update on the current state of knowledge of anthropogenic noise in the Southern Ocean and endorsed the recommendations.

4. *Increasing recognition of the need to underpin decision regarding the management of human activity with scientific evidence.*

The Rotterdam workshop on Antarctic Tourism, the endorsement of recommendations arising from that Workshop in the CEP, and the ATCM XL Resolution (pending at the time of writing) provided clear recognition of the need to underpin future management of tourism with scientific evidence and SCAR was acknowledged as the key provider of that advice.

Direct support from outside organisations received for your activities
(Numbered list with values indicated if direct cash support. Please restrict in-kind support to substantive in-kind support only)

1. The workload of SC-ATS continues to increase, and therefore, so does the in-kind contribution of the Australian Antarctic Division through Terauds' time. This in-kind support is currently calculated to be approximately US\$35,000 per annum. Other Committee members' in-kind support has not been provided here but both individually and cumulatively is substantial.

Major collaborations your Committee has with other SCAR groups and with organisations/groups beyond SCAR
(Numbered list of substantive collaborations)

Within SCAR

1. Antarctic Climate Change and the (Annual report)
2. Life Sciences (Codes of Conduct)
3. Action Group on Geological Heritage and Geoconservation (Code of Conduct, List of Geological Repositories, Methodology for the identification)
4. Standing Group on Humanities and Social Sciences (advice on Treaty submissions and PA workshop input)
5. SRP Programme Planning Groups - advice (to PPGs) on development of science and implementation plans

Outside SCAR

1. COMNAP (update to checklists)
2. IAATO (research collaborations)

3. Principality of Monaco (ongoing research funding/collaborations)
4. Australian Antarctic Division (research collaborations)
5. CEP - Through Subsidiary Groups and intersessional input
6. SC-CAMLR, and CCAMLR Working Groups

Updates for your group's SCAR web page

Currently the webpage is up to date.

Appendix 1
SCAR submissions to the 2019 CEP/ATCM

Working Paper	Agenda	Title	Proponents
WP017	CEP 10c	SCAR's Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica	SCAR
WP037	ATCM 15	Sixty Years of Treaty-Supported Antarctic Science	SCAR
WP050	CEP 10a	Review and Update of the "Checklists for supply chain managers of National Antarctic Programs for the reduction in risk of transfer of non-native species"	COMNAP SCAR
WP052	CEP 11	Antarctic Environments Portal	Australia Netherlands New Zealand Norway SCAR Spain USA
WP068	CEP 10c	Anthropogenic Noise in the Southern Ocean: an Update	SCAR
WP070	CEP 9e	Recommendations arising from the Joint SCAR / CEP Workshop on Further Developing the Antarctic Protected Area System. Prague, Czech Republic, 27-28 June 2019	Australia Czech Republic SCAR USA
IP010	CEP 10c	An update to the state of knowledge of wildlife responses to unmanned aerial vehicles	Germany Portugal SCAR Spain
IP023	CEP 11	Antarctic Environments Portal: Content Management Plan	Australia Netherlands New Zealand Norway SCAR Spain USA
IP024	ATCM 17 CEP 9e	Systematic Conservation Plan for the Antarctic Peninsula Project Updates	IAATO SCAR
IP028	ATCM 4	The Scientific Committee on Antarctic Research Annual Report 2019 to the Antarctic Treaty Consultative Meeting XLII	SCAR

IP042	CEP 10b	Emperor penguins - vulnerable to projected rates of warming and sea ice loss; an international collaboration to inform species-related conservation decision-making and conservation planning	United Kingdom ASOC Australia Finland France Germany Monaco Norway SCAR
IP049	ATCM 11 CEP 5	An update on the World Meteorological Organization-Scientific Committee on Antarctic Research Joint Fellowship Programme	SCAR WMO
IP050	CEP 8b	Draft SCAR Code of Conduct on Geosciences Field Research Activities in Antarctica	SCAR
IP051	CEP 10c	State of Antarctic Penguins 2019 Report	SCAR
IP052	CEP 9e	A snapshot of terrestrial biodiversity protection in Antarctic Specially Protected Areas	SCAR Australia
IP053	ATCM 9	Biological Prospecting in Antarctica: An update on the review by SCAR	SCAR
IP074	CEP 5	A Memorandum of Understanding between the Scientific Committee on Antarctic Research and the International Polar Heritage Committee	SCAR
IP075	ATCM 15 CEP 5	Update on activities of the Southern Ocean Observing System (SOOS)	SCAR
IP093	ATCM 15 CEP 5	The International Programme for Antarctic Buoys	WMO SCAR
IP135	ATCM 15 CEP 7a	SCAR Science Lecture 2019: What Does the Paris Climate Agreement mean for Antarctic and Southern Ocean Environmental Protection?	SCAR
IP136	CEP 7a	Antarctic Climate Change and the Environment – 2019 Update	SCAR
IP165	CEP 9e	Co-conveners' report of the Joint SCAR / CEP Workshop on Further Developing the Antarctic Protected Area System. Prague, Czech Republic, 27-28 June 2019	Australia Czech Republic SCAR USA
BP003	CEP 10c	Anthropogenic Noise in the Southern Ocean: an Update	SCAR

Appendix 2

Progressing Geological Heritage and Geoconservation

Background information

In 2014, the Committee for Environmental Protection (CEP) (i) noted that relatively few Antarctic Specially Protected Areas (ASPAs) have been designated to protect geological features primarily, (ii) acknowledged the importance of guaranteeing protection of geological values, and (iii) welcomed further discussion on the matter. The issue of 'Protection of outstanding geological values' was placed on the CEP Five-Year Work Plan to consider further mechanisms for conservation and protection of outstanding geological values, including advice from SCAR. In response, SCAR established the Action Group on Geological Heritage and Geoconservation under the SCAR Geosciences Group, which was charged with considering the systematic protection of geological values.

The Action Group outputs have been the base for the following SC-ATS policy outputs on this issue to CEP:

- ATCM XXXIX IP31. (2016). *Antarctic Geoconservation: a review of current systems and practices*. This paper explored the threats and existing mechanisms for protection of Antarctic geological values.
- ATCM XLII IP50. (2019). *Draft SCAR Code of Conduct on Geosciences Field Research Activities in Antarctica*. This paper asks CEP Members to consider and provide feedback on a draft Code of Conduct intended to help geoscientists minimize the environmental impact of their fieldwork.

In addition to the outputs listed above, and in response to the request for advice on the protection of geological values from the CEP, the Action Group has almost finalised the development of a methodology for identifying and classifying features of potential geological heritage value within the Treaty area. The methodology is based largely on existing methods used to identify geological heritage in other parts of the world, but adapted to the unique circumstances found within the Antarctic Treaty area. It should be noted that an aim of this work is ensure future scientific research is not inhibited, but rather, that the scientific and intrinsic values of geological sites are identified and preserved for future researchers, as appropriate.

Next steps

It is essential that SC-ATS and the Action Group work closely over the coming year to ensure effective delivery of policy advice on protection of Antarctic geological values to CEP. It is intended that several further outputs should be submitted to CEP XXXIII in 2020:

1. The List of National Repositories Housing Antarctic Geological and Palaeontological Specimens

2. The SCAR Code of Conduct on Geosciences Field Research Activities in Antarctica

The Code of Conduct should be finalised, taking into consideration comments from CEP Members, then submitted to CEP XXXIII for possible endorsement by the ATCM through Resolution.

3. The finalised Proposed Methodology for the Identification of Antarctic Geological Heritage Subject to approval of the proposed methodology by CEP, SCAR may be well-placed to deliver advice on elements of the methodology to the Committee. However, carrying out this work, on an on-going basis, would likely involve the establishment of a SCAR Expert Group under the SCAR Geosciences Group, which would be subject to SCAR Delegates approval.

SC-ATS endorses the submission of these outputs. However, the resource implications of potentially establishing a SCAR Expert Group to implement the proposed methodology for the identification of Antarctic Geological Heritage should be noted. Should the CEP see merit in the proposed methodology, following its consideration of the SCAR submission detailing the methodology submitted to CEP XXXIII in 2020, SC-ATS propose that a paper be submitted to the SCAR Delegates meeting in Hobart (August 2020), through the Geosciences Scientific Group, proposing the establishment of an Expert Group to implement the methodology and provide appropriate advice to CEP. While the Expert Group would be proposed under the Geosciences Group the nature of the work would require working closely with SC-ATS, facilitated through the SC-ATS Chief Officer and the Geosciences Group representative on SC-ATS.

Between now and the Hobart meeting in 2020, SC-ATS will work closely with the Action Group on Geological Heritage and Geoconservation to support this work and to further test the methodology that has been developed to identify sites of outstanding Geological Heritage. SC-ATS could provide some additional funding support to the Action Group in 2020 if it is needed.